Hydrangea paniculata – Euro-trial

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In the past years (2007-2009) the results of the individual Euro-trials partners were published in the various countries. Now that all results are collected this overview lists all results of all participating organisations (countries).

Euro-trials

In February 2002 R. Houtman, Secretary of the Trials Committee of the Royal Boskoop Horticultural Society (RBHS) and Mr. Schwarz, Managing Director of the Bund deutscher Baumschulen (BdB) first discussed a cooperation between the Netherlands and Germany in trialling plants. Both the BdB and RBHS were already involved in trialling genera or parts of genera of ornamental plants.

Within a few weeks contacts between the RBHS and BdB were established and in April 2002 a small party, led by Dr. Burkhard Spellerberg, visited Boskoop to discuss the possibilities of international trials. Several genera were discussed and both organisations agreed an international trial of *Hydrangea paniculata* would be welcome.

These organisations also agreed that a British and French cooperation would be desirable. As the RBHS already had contacts with the Royal Horticultural Society (RHS) and (through the Boskoop Research Station) the Institut National d'Horticulture (INH), these two organisations were to be invited to join the intended international trials.

Both the INH and the RHS responded enthusiastically when asked to cooperate in the international trials and at a meeting at the IPM in Essen (Germany) the goal and planning of the international trial was discussed. The result was a working paper. It was also agreed to have at least one annual meeting with all participating countries present. The location of the annual meeting would alternate between participating countries.

Over the years the original working paper has been amended to take into account decisions made at annual meetings:

- The four organisations are chosen because they are not directly funded by one or a
 few companies, so a high level of objectivity can and will be maintained. It is possible
 other countries will be represented in future projects, but this project has started with
 these four parties.
- 2. In each trial conducted the same cultivars will be planted in all participating countries, with a maximum of two trial sites per country.
- 3. All rooted cuttings will be delivered by the organisation that coordinates the Euro-trial.
- 4. The Secretary of the Trials Committee of the RBHS will act as overall Secretary of the Euro-trials project.
- 5. If and when starting other international trials, other organisations will be asked to coordinate these by rotation.
- Each organisation carries out trials according to their own standards, however, a standardisation of documents will be carried out by the organisation that coordinates a specific trial. These documents are to be sent to all participants during the trial period.
- 7. Each organisation will be able to award the best cultivars in its own country.
- 8. One report, in which all results from all participants are published, will be written in English.
- 9. Of course all participants are free to write publications in their own language, apart from the international report.
- 10. All official correspondence regarding Euro-trials will be in English.

- 11. After making an appointment, it will be possible for all participants to trial at the site(s) of another participant.
- 12. The name "Euro-trials" is accepted and used by all participants

Present

In 2010 organisations from seven countries are active as Euro-trials participants. The four original participants from France, Germany, the United Kingdom and the Netherlands are still active. After reorganisation the French part of Euro-trials is now coordinated by Agro Campus Ouest (based in Angers).

In 2006 and 2007 Austrian and Irish organisations decided to participate in Euro-trials. In 2009 the Belgian Proefcentrum voor Sierteelt (PCS) in Destelbergen also agreed to participate. Italian participation remains difficult - due to communication problems plants to be planted for the *Weigela* Euro-trial were not delivered in Italy.

In 2010, the participating organisations are (in alphabetical order per country):

Austria: Höhere Bundeslehr- und Forschungsanstalt für Gartenbau (HBLFA), Vienna

Belgium: Proefcentrum voor Sierteelt (PCS), Destelbergen

France: Agro Campus Ouest, Angers

Germany: Bund deutscher Baumschulen (BdB), Hannover

Ireland: Teagasc, Kilkenny

Netherlands: Koninklijke Vereniging voor Boskoopse Culturen (KVBC), Boskoop

United Kingdom: Royal Horticultural Society (RHS), Wisley

(Italy: Centro Sperimentale Vivaismo, Pistoia)

Results Euro-trial Hydrangea paniculata

An important criterion of Euro-trials is that the plants to be assessed are propagated in one batch after being collected. After propagation the plants are delivered to the various trialling locations. All organisations/locations start with similar plants. The *Hydrangea paniculata* plants were collected in Boskoop. They were propagated by Boomkwekerij Lendert de Vos BV in June-July 2003. The rooted cuttings were delivered to the participants in November 2003. Four countries participated in this first Euro-trial. In spring 2004 the plants were potted and in autumn 2004 they were planted outdoors in the following locations:

Location	USDA	Soil type	pH	Annual rainfall
<u>France</u> Pépinières Minier (Beaufort-en-Vallée)	8b	dilluvial sandy clay	7.0	680 mm
Germany				
Prüfstelle Rethmar (Hannover)	7a	sandy clay	6.2	605 mm
Fachhochschule Weihenstephan (Friesing)	6a	heavy loam	7.1	780 mm
Netherlands				
PPO (Boskoop)	8b	peat	5.0	850 mm
Darthuizer Boomkwekerijen (Leersum)	8a	dilluvial sand	6.7	670 mm
United Kingdom				
RHS Garden (Wisley)	9a	sandy loam	6.8	625 mm

Six plants per cultivar were planted in each location. In 2005 the plants were insufficiently developed in most locations to be assessed. Only the peat soil in Boskoop made the plants grow very vigorous and well-flowering. They were assessed in 2005 for the first time. Judging took place in all locations in 2006 and 2007.

Depending on the collected data per country the trials ended in various years. In 2007 Agro Campus Ouest (France; at that time still working as Institut National d'Horticulture) and the KVBC (Netherlands) finished their part of this Euro-trial. The RHS (United Kingdom) finished their part in 2008. Finally the German BdB finished the Euro-trial of *Hydrangea paniculata* in 2009.

A crucial part of Euro-trials is an overall publication in which all ratings for all plants in all participating countries are shown and compared. As is to be expected, there are differences in systems of rating between countries. The Dutch KVBC and German BdB rate the plants with "stars" (see explanation below). The RHS awards only the best plants with an Award of Garden Merit, usually shortened to AGM. For Euro-trials the RHS has also rated the varieties with stars, following the system used in Germany and the Netherlands. The French have rated the plants with a numerical system (10 = excellent, 0 = very bad), which was later translated into stars.

Euro-trials final report

The plants with which all four locations started the trials all had the same age and were propagated and grown under the same circumstances. Still some differences occurred in the various locations. For reasons related to specific circumstances and difficulties various plants were not assessed in all countries. The various committees in participating countries described their ratings of each cultivar.

With regard to the ratings of the RHS the following comments are important:

recommended to be rescinded at the AGM Review in 2012.

AGM subject to availability to the public

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GERMANY:

Habit less good, too open; inflorescence too loose and open, however, over-all impression good.

FRANCE: 4.3

Good colour, but not recommended to be grown.

THE NETHERLANDS: **

Good fading of the flowers to pale pink in combination with a dense and low habit (even on peat); ratings increased during the progression of the trial.

UNITED KINGDOM:

Compact habit; distinctive flowers fading pale pink; showed foliage scorch, reflecting sensitivity to mineral deficiency.

H. paniculata 'Big Ben'

GERMANY: */**

Attractive flowers, but with a less uniform habit, occasionally with somewhat arching branches; overall impression good to very good.

FRANCE: 6,9

Elegant, but with a somewhat irregular habit; colour of the flowers is highly rated.

THE NETHERLANDS: ***

Sturdy stems, large, rather slender inflorescences; good colour of sterile florets when fading; extended flowering-period.

UNITED KINGDOM: *** (AGM)

Outstanding, very free flowering; attractive red stems; flower goes off to a good pink; interesting inflorescence with (small) leaves between the florets. Differences in pruning regime appear to have little impact.

H. paniculata 'Bridal Veil'

GERMANY: 0

Over-all impression very poor; panicle too open and not attractive.

FRANCE: 3,3
Shapeless plant; not recommended.
THE NETHERLANDS: 0

Except for the beautifully-shaped sterile florets this cultivar has no added value at all; its stems are too weak and floppy; not very floriferous.

UNITED KINGDOM: C

Plant tends to flop badly, probably better when mature; an excellent flower arranger's plant.

H. paniculata 'Brussels Lace'

GERMANY: *

Rather loose habit and inflorescence, good overall impression; relatively short flowering-period.

FRANCE: 6,1

Average and therefore not very distinguished; improving during the season.

THE NETHERLANDS: C

Not a bad cultivar (good compact habit, strong stems, large panicles), but the relatively short flowering-period and the fact that older plants tend to lose shape made the Trials Committee decide to award 'Greenspire' and 'Kyushu' instead of 'Brussels Lace'.

UNITED KINGDOM:

Compact; sterile florets staying white in late season.

H. paniculata 'Burgundy Lace'

GERMANY: ***

Attractive colour, large panicles, striking when fading; excellent overall impression.

FRANCE: No rating.

THE NETHERLANDS:

Flowers reasonably fading pinkish; branches occasionally somewhat weak; has been surpassed by 'Big Ben' and 'DVPPinky' (PINKY WINKY); performs better on heavier soils.

UNITED KINGDOM: **

Plants and flowers of even size; sterile florets flushed lightly pink as the flower ages.

H. paniculata 'Dharuma'

GERMANY: **

Compact and dense habit, also suitable for use in smaller gardens; attractive colour when opening and good brownish red when fading. Very good overall impression.

FRANCE: 4,3

Good flower, but without added value as a plant; typical but insufficient habit.

THE NETHERLANDS: No rating.

UNITED KINGDOM:

Attractive red stems; early and free flowering; well-coloured (deep pink) sterile florets; slower growth rate than other *H. paniculata* cultivars and therefore suited to use in small(ler) gardens.

H. paniculata 'Dolly'

GERMANY: **

Compact inflorescences, rich-flowering, attractive colour; excellent overall impression.

FRANCE: 6,2

Handsome overall impression; good, regular-shaped plant.

THE NETHERLANDS:

Beautiful and good cultivar; very similar to 'Limelight' and 'Phantom' and for this reason not awarded (and thus give preference to 'Limelight' and 'Phantom').

UNITED KINGDOM: *** (AGM)⁾²

Good, undulate leaves; delightfully shaped, dense inflorescences consisting of cream-coloured florets that fade light pink; is regarded one of the improvements of 'Grandiflora'. Responds well to pruning, however, medium pruning is preferable as hard pruning produces very large, heavy heads which tend to flop.

H. paniculata 'DVPPinky' (PINKY WINKY)

GERMANY: **

Planted in the trials field after the assessments had started; good ornamental value.

FRANCE: No rating.

THE NETHERLANDS: ***

Excellent symmetrical cone-shaped heads; spectacular deep red to purple-red fading of the florets; strong branches, compact habit and floriferous.

UNITED KINGDOM: *** (AGM)

Very distinct with strong branches and a compact upright habit; sterile florets colour deeply pink when fading; suitable for small gardens.

H. paniculata 'Everest'

GERMANY: 0/*

Very attractive colour but with an irregular habit; more difficult to produce without regular pruning; moderate overall impression.

FRANCE: 4,1

Irregular habit, therefore of little value for growers; nice when in flower.

THE NETHERLANDS: C

Rather loose and irregular habit; short flowering period, not very attractive fading of florets.

UNITED KINGDOM:

Not considered very distinct; flowers of a dirty pink when fading.

H. paniculata 'Floribunda'

GERMANY: *

Large flowerheads; attractive in colour and when fading; Uniform habit; good overall impression.

FRANCE: 4,9

Opinions divided; has no special or additional ornamental value.

THE NETHERLANDS: 0

Of historic significance as an important ancestor of the modern cultivars; surpassed by newer cultivars in ornamental value.

UNITED KINGDOM: 0⁾¹

Elegant pointed panicles, creamy florets develop some pink as they age. Needs pruning to prevent from growing too large.

H. paniculata 'Grandiflora'

GERMANY: **

Large panicles, attractive colour and fading beautifully; good habit, very good overall impression.

FRANCE: No rating.

THE NETHERLANDS:

Branches (much) too weak; rather susceptible to red spider mite and rust; probably worth growing on standards.

UNITED KINGDOM: 0⁾¹

Dense panicles cause stems to flop; habit less good due to weak stems; superseded by 'Phantom'.

H. paniculata 'Greenspire'

GERMANY: **

Very large inflorescences, rich-flowering in a good colour, fading of the florets is attractive as well; leaves also present in the inflorescences (typical); uniform in habit, very good overall impression.

FRANCE: 6,7

Beautiful as a whole, attractive and highly ornamental when flowering; good regular habit; well-shaped but rather open panicles, somewhat washed out when fading.

THE NETHERLANDS: **

Attractive dark green foliage, also present in the inflorescences (typical); upright habit with strong branches, rich-flowering in a good colour.

UNITED KINGDOM:

Vigorous, open to half-open panicles, like many in this group, not fading pink(ish).

H. paniculata 'Harry's Souvenir'

GERMANY:

Small panicles but in an attractive colour; habit not good enough due to weak and flopping branches; however, overall impression good.

FRANCE: 4,4

Compact, irregular growth, seems useful as a groundcover; branches too weak causing panicles to flop and touch the soil.

THE NETHERLANDS:

Somewhat similar to 'Grandiflora' but with smaller panicles; not very conspicuous and adding no ornamental value; seems suitable for growing on standards (like 'Grandiflora').

United Kingdom:

Plants in the trials field prove rather weak; branches are too weak causing flowering stems to flop; untidy habit.

H. paniculata 'Kolmagimo' (MAGICAL MOONLIGHT)

GERMANY: No rating. FRANCE: No rating.

THE NETHERLANDS:

Very large and ornamental inflorescences with extremely large sterile florets; not branching well, pruning absolutely needed; branches too weak to carry the heavy panicles.

UNITED KINGDOM: No rating.

H. paniculata 'Kyushu'

GERMANY:

Medium-sized, loose panicles intermixed with green leaves (like 'Greenspire'), panicles somewhat irregularly spread over the plants; good overall impression.

FRANCE: 5,9

Regular habit; flowers irregularly spread over the plants; plants in the trials field varied in flowering time; not very distinct.

THE NETHERLANDS:

Well-growing, excellent branching; rather narrow habit; very good for growing in containers; rather loose panicles with a "natural" appearance.

UNITED KINGDOM: *** (AGM)

Regular habit, responds well to pruning; does well in a pot; very attractive to insects as it has more fertile florets than many other cultivars; sterile florets small and remain white.

H. paniculata 'Limelight'

GERMANY: ***

Very large and dense panicles, attractive colours throughout flowering; rich-flowering; dense and uniform habit, excellent overall impression.

FRANCE: 7,5

Very beautiful plant with a very conspicuous ornamental value that is rated very highly.

THE NETHERLANDS: ***

Excellent cultivar with a dense and compact habit, rich-flowering in very distinct and characteristic colours; flowers over a long period.

UNITED KINGDOM: *** (AGM)

Stunning and very distinctive; excellent glossy foliage; medium pruning is recommended, reducing flopping of heavy panicles.

H. paniculata 'Mega Pearl'

GERMANY: **

Large, very dense inflorescences in attractive colours, also when fading; very floriferous;

branches slightly arching when in full bloom; very good overall impression.

FRANCE: 7,7

Handsome plant, well-balanced when in flower; interesting for both growers and consumers.

THE NETHERLANDS: 0

Good cultivar, very similar to 'Phantom', reason for the Dutch Trials Committee not to award 'Mega Pearl' (and thus recommending 'Phantom').

UNITED KINGDOM:

Good, rather large panicles, however, sterile florets somewhat crowded; foliage slightly scorched in late summer.

H. paniculata 'Mid Late Summer'

GERMANY: *

Good colour, somewhat loose panicles, floriferous; uniform in habit; good overall impression.

FRANCE: 6,0

Good overall impression; regular in habit and flowering; good autumn colours.

THE NETHERLANDS: 0

Not very distinct; the more or less similar 'Greenspire' and 'Kyushu' are rated higher.

UNITED KINGDOM:

Good sturdy plant, very floriferous but crowded, panicle fades pink gracefully. Similar to 'Mega Pearl', but surpassed by 'Big Ben'.

H. paniculata 'Mustila'

GERMANY:

Attractive conical panicles, flowers fade pinkish very well; uniform habit, good overall impression.

FRANCE: 6,5

Opinions divided; graceful, regular habit; inflorescence somewhat loose but neat.

THE NETHERLANDS: 0
No distinct features noted.
UNITED KINGDOM: 0

Poor habit due to rather thin branches; attractive red stems.

H. paniculata "National Arboretum"

GERMANY:

Panicles not very attractive, too loose; irregular habit, very poor overall impression.

FRANCE: 4,9

Not very ornamental; irregular habit; ornamental value decreases during the season.

THE NETHERLANDS: No rating.

UNITED KINGDOM: 0

Too wide in habit, panicles too open.

H. paniculata 'Pee Wee'

GERMANY: */**

Large, very dense panicles, florets not pure white, but attractive when fading; somewhat arching branches due to the weight of the flowers; good to very good overall impression.

FRANCE: No rating.

THE NETHERLANDS: 0

Not very ornamental; rather loose habit; quite susceptible to Red spider mite and Rust.

UNITED KINGDOM: 0

Pruning regime resulted in big differences in habit and flowering. Hard pruning resulted in a gappy plant with an irregular habit and weak stems; not very distinct.

H. paniculata 'Phantom'

GERMANY: */**

Very large, dense panicles, attractive when in full bloom as well as when fading; very floriferous; stems slightly arching when in full bloom; good to very good overall impression.

FRANCE: 7,9

Very attractive plant with an excellent ornamental value; uniform in habit; all proportions are correct in this cultivar.

THE NETHERLANDS: **

Like 'Limelight' this is a First-class cultivar; florets "whiter" than in 'Limelight', but fading deeper red; characteristic shape of the panicles (flattened with a small pointed tip).

UNITED KINGDOM: *** (AGM)

One of the most impressive plants in this trial; very stiff branches supporting the dense panicles very well; beautifully shaped panicles, somewhat denser than in 'Limelight'; superseding 'Grandiflora'.

H. paniculata 'Pink Diamond'

GERMANY: */**

Dense panicles, very attractive from first opening of the flowers to after fading, floriferous; somewhat arching branches due to the weight of the panicles; good to very good overall impression.

FRANCE: 5,5

Opinions divided; flowering and fading are highly rated, but the habit is decreasing during the season.

THE NETHERLANDS: *

Somewhat irregular when young, old(er) specimens very attractive; excellent colours when fading; seems a better performer on more heavy soil types.

UNITED KINGDOM: *** (AGM)

Despite a showed sensitivity for an apparent mineral deficiency on the trial site this cultivar is known to perform very well; the late season colour is magnificent; outstanding and ornamental.

H. paniculata 'Pink Lady'

GERMANY: o/*

Inflorescence less handsome, too loose; not very uniform in habit, average overall impression.

FRANCE: 5,0

Highly rated early in the season, but disappointing in late summer and autumn.

THE NETHERLANDS: No rating. UNITED KINGDOM: *** $(AGM)^{1/2}$

Distinctive, attractive pink flushing developing around the margin of the cream floret; dense panicles; benefits from hard pruning.

H. paniculata 'Praecox'

GERMANY: o/*

Inflorescences not very attractive, too loose; reasonable overall impression.

FRANCE: 4,9

The reputation of this cultivar is confirmed in the trial; good when in flower but fades disappointingly.

THE NETHERLANDS: No rating.

UNITED KINGDOM: **

Distinctive flower and lime green Young foliage; floriferous and strong.

H. paniculata 'Silver Dollar'

GERMANY: **/***

Attractive, somewhat rounded inflorescences, very rich-flowering, flowers fade pink very good; compact habit; very good to excellent overall impression.

FRANCE: 6,7

Elegant cultivar with an attractive habit; handsome flowers.

THE NETHERLANDS:

Handsome dense panicles; good white colour; young plants somewhat irregular in habit; very floriferous once established; susceptible to Red spider mite and Rust; suited to be pot-grown.

UNITED KINGDOM: *** (AGM)

Compact habit, visually enhanced by very dense panicles; matures to a good pink; strong branches support the heavy inflorescences very well; responds well to pruning, resulting in larger panicles and delayed flowering thereby extending the flowering period; good for small gardens.

H. paniculata 'Skylight'

GERMANY: 0

Flowers not very attractive; panicles too loose and irregular.

FRANCE: 6,4

Opinions divided: from a very gracious habit to a very bad habit; in any case: irregular.

THE NETHERLANDS: 0

Very (too) vigorous; flowers late in the season.

UNITED KINGDOM:

Handsome semi-open panicles with attractive pure white florets; unpruned plants flower significantly earlier in the season than hard pruned ones.

H. paniculata 'Taiwan Form'

GERMANY: 0

Inflorescence too loose and not attractive, does not flower well each year; foliage not attractive; very low ornamental value.

FRANCE: 5,9

Opinions very divided; overall impression varies from good to bad; not very ornamental during the second half of the season.

THE NETHERLANDS: No rating.

UNITED KINGDOM:

Rich-flowering; distinctly subtle and dainty, open panicles; attractive red stems; goes well with herbaceous perennials and is fantastic for butterflies.

H. paniculata 'Tardiva'

GERMANY: C

Long, loose and somewhat irregularly shaped panicles, very open habit; ornamental value low to average; very low overall impression.

FRANCE: 6,0

Interesting cultivar, the shape of the inflorescences is highly rated.

THE NETHERLANDS: 0

Not very distinct; only slightly pink when fading; has a very long flowering period; somewhat irregular habit, slightly more susceptible to Red Spider Mite and Powdery Mildew.

UNITED KINGDOM: No rating.

The plants in the RHS trial are very similar to 'Floribunda'; it was not proved whether the plants in the RHS trial were true to name so the Woody Plant Trials Sub-committee decided not to assess this entry.

H. paniculata 'Tender Rose'

GERMANY: *

Loose and open habit, loose inflorescences, rich-flowering; good ornamental value.

FRANCE: 5,0

Opinions divided; habit uniform and graceful; not very distinct.

THE NETHERLANDS: 0

Conspicuous slender and pointed panicles; colour not very intense when fading.

UNITED KINGDOM:

Half open panicles displaying a nice contrast between pink fertile buds and white sterile florets.

H. paniculata 'Unique'

GERMANY: *

Large panicles, varying from rather loose to quite dense; floriferous; open habit; good overall impression.

FRANCE: No rating.

THE NETHERLANDS:

Charming cultivar; the number and location of the sterile and fertile florets in each panicle is well-balanced; is a better performer on heavy soil types.

UNITED KINGDOM: **)

Although excellent, older plants can be seen at Wisley Garden (on Battleston Hill), this cultivar did not meet expectations in trial. Superseded by more recent introductions.

H. paniculata 'White Goliath'

GERMANY: No rating FRANCE: 5,8

Lovely combination of plant shape and flowers; well-formed plants, vigorous; opinions divided when it comes to the fading of the sterile florets.

THE NETHERLANDS: 0

Not very distinct; flowers almost not fading; vigorous, perhaps interesting as stock for grafting other cultivars ('Grandiflora', 'Harry's Souvenir') on a standard.

UNITED KINGDOM:

Named for its vigour, but it is not distinctly more vigorous than other cultivars; has an average ornamental value.

H. paniculata 'White Lace'

GERMANY: 0

Early flowering; large panicles; unfortunately with a highly irregular habit; overall impression not good enough.

FRANCE: 3,2

Very irregular in habit; no structure at all; of no value for horticulture.

THE NETHERLANDS: 0

Heavy inflorescences causing branches to flop; irregular habit.

UNITED KINGDOM: 0

Not very impressive; five out of six plants died during the trial.

H. paniculata 'White Lady'

GERMANY: **

Large inflorescences, very attractive when in flower, rich-flowering; very good overall impression.

FRANCE: 5,9

Looks average at first, but has an elegant "classical" appearance; regular habit, beautiful flowers.

THE NETHERLANDS: 0

Somewhat similar to 'Kyushu', but slightly broader and less vigorous; 'Kyushu' was rated higher.

UNITED KINGDOM: C

Apart from the attractive serrate sterile floret petals this cultivar is not very distinct.

H. paniculata 'White Moth'

GERMANY:

Habit not uniform; loose panicle, nice colours, good overall impression.

FRANCE: 5,9

Opinions divided; rather weak stems, therefore slightly arching; large, loose panicles.

THE NETHERLANDS: No rating.

UNITED KINGDOM:

Handsome, half-open rounded panicles; will perform well in (semi-)shade as well; after hard pruning the plant produces larger blooms with a tendency to flop; in practice deadheading will be sufficient; needs time to develop into a large, graceful shrub, therefore only suited to large gardens.